Card Printer User's Manual

ID-2000 Series

PPC
Plastic Card Solutions

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CAUTION

User should read caution information and keep in mind before using. Different icons remind important information as to safety. PPC is not responsible for physical harm to body or physical damage to the product occurred by user's careless use.

Danger	Warns user of risk of losing life or being seriously injured.
Warning	Warns user of risk of being seriously or slightly injured, or damage to product.
Caution	Warns user of slight damage to body.
	Indicates information that supplements detailed information.

Danger

Warns user of risk of losing life or being seriously injured.

POWER

- Do not use damaged power cord, plug or socket.
- Do not pull plug with power cord.
- Do not touch power plug with wet bare hand.
- Do not bend power cord or put heavy things on the power cord.
- Unplug during thunder and lightning or storage.

INSTALLATION

- Do not put the printer in wet, dirty place.
- Do not put lightings on the printer. Put the printer away from heat source.
- Unplug while moving the printer.
- Put the printer away from flammable source.

CLEANING

- Clean the wet and dirty plug.
- Unplug the printer before cleaning. Do not use water or chemical cleanser.

MISCELLANEOUS

- Do not put water bowel, medicine, metal on the printer.
- In case of abnormal situation in the printer, unplug the printer immediately and contact your dealer.
- Make sure that you use adequate power adaptor.

Caution Warns user of slight damage to body.

INSTALLATION

- Do not put the printer on unstable surface.
- Avoid direct sunlight that may cause damage.

CLEANING

- Do not disassemble cover or protection parts.

vWhen you put hand inside the printer, do not operate it.

- Make sure that you perform cleaning and maintenance according to the instructions.

MISCELLANEOUS

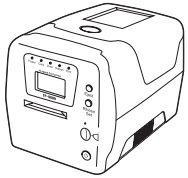
- Do not disassemble, repair, modify.
- Do not put heavy items on the printer.

1. Getting Started

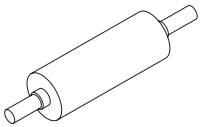
1.1 Introduction

This card printer enables user to create cards easily and quickly in accordance with the card specifications you wish to get.
You can get high quality color image mode in dye sublimation printing. In order to meet customers demand, it provides options such as M/S, IC(Contact), RF(Contactless) encoding as well as bar code, diagram, picture printing.
It is useful for creating membership card, bonus card and identification card on PET, PVC card.

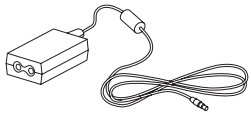
1.2 Contents in Package



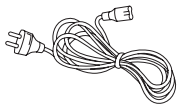
ID-2000



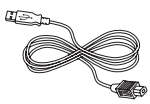
CLEANING ROLLER



POWER ADAPTOR

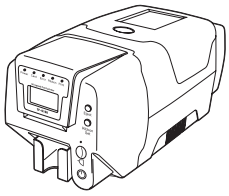


POWER CABLE

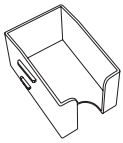


USB PRINTER CABLE

SOFTWARE CD



ID-2100/2200



STACKER

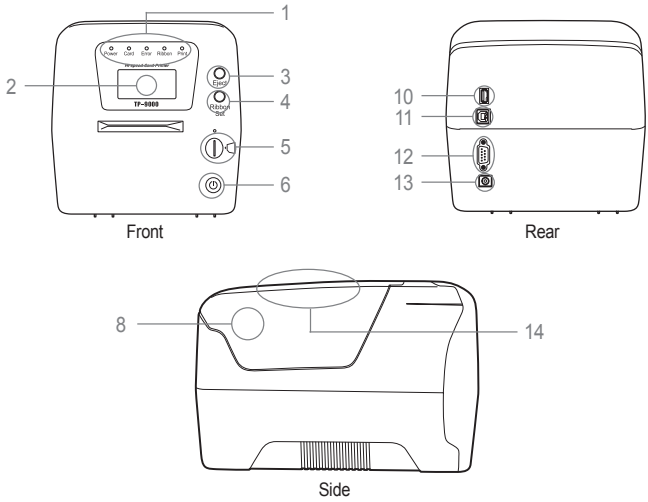
(not applicable for ID-2000)

USER MANUAL

Please make sure that printer and all the accessories are in good order.
If any items are missing, please contact your dealer.

1.3 Product Features

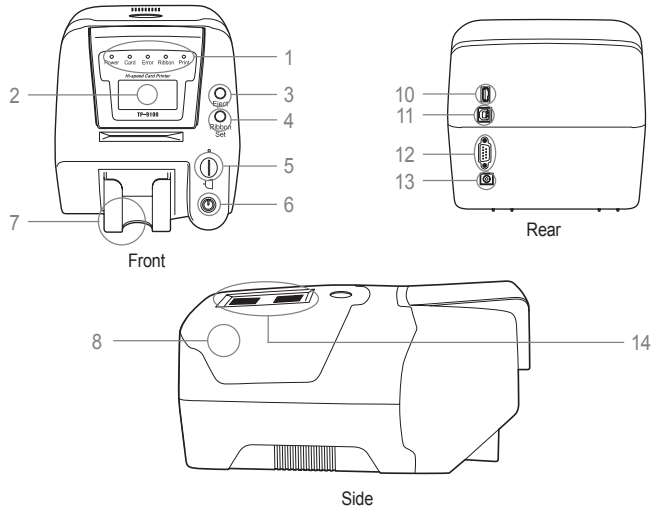
ID-2000 (Manual Feeding, Single-sided Printing)



Features Description

No	Features	Description
1	LED Display	LED shows the status of printer
2	LCD Display	LCD panel displays the status of printer
3	Card Eject	Button for ejecting card from the printer
4	Ribbon Load	Button for replacing or repositioning ribbon
5	Mobile Connector	Socket for mobile chip (Option)
6	Power Button	Power on and off
7	Card Output Stacker	Stacker for released output cards
8	Printer Lid	Open for replacing ribbons and cleaning rollers
9	Flipper	Used for Dual sided printing (Option)
10	USB Socket	Used for memory stick or USB connecting
11	USB Communication Port	Used for connecting PC and printer with USB cable
12	RS232C Communication Port	Used for connecting PC and printer with RS232C
13	Power Socket	Used for supplying power
14	External RF	Recognize RF Card

ID-2100 (Automatic Feeding, Single-sided Printing)



Features Description

No	Features	Description
1	LED Display	LED shows the status of printer
2	LCD Display	LCD panel displays the status of printer
3	Card Eject	Button for ejecting card from the printer
4	Ribbon Load	Button for replacing or repositioning ribbon
5	Mobile Connector	Socket for mobile chip (Option)
6	Power Button	Power on and off
7	Card Output Stacker	Stacker for released output cards
8	Printer Lid	Open for replacing ribbons and cleaning rollers
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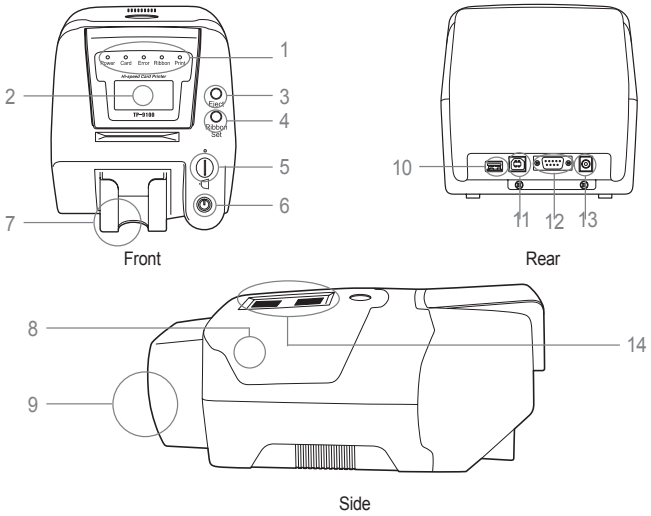
12	RS232C Communication Port	Used for connecting PC and printer with RS232C
13	Power Socket	Used for supplying power
14	External RF	Recognize RF Card

Even though we have three different models of ID series, since there is no big difference in operating them, user manual is designed for ID-2200 Dual Sided as main reference.

ID-2200 (Automatic Feeding, Dual-sided Printing)



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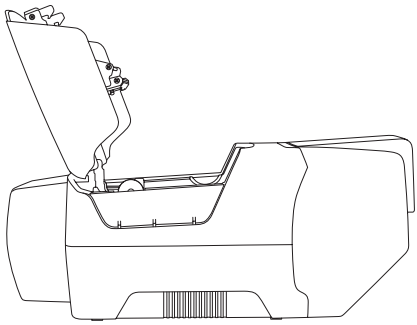
14	External RF	Recognize RF Card

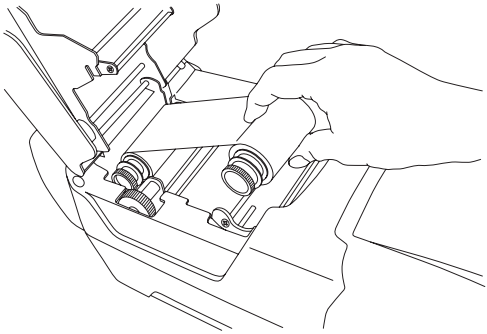
Even though we have three different models of ID series, since there is no big difference in operating them, user manual is designed for ID-2200 Dual Sided as main reference.

1.4 Loading Ribbon



1 Unpack ribbon carton box.

2 Open printer lid by pressing Cover Release Button and raise it fully.

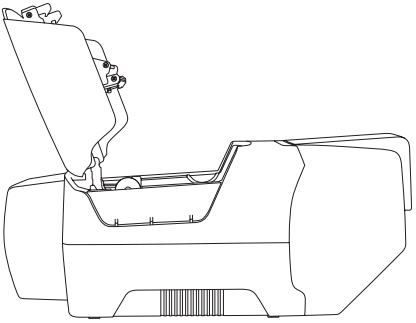


3 Make sure that ribbon on is placed in right position and the printer lid is closed.

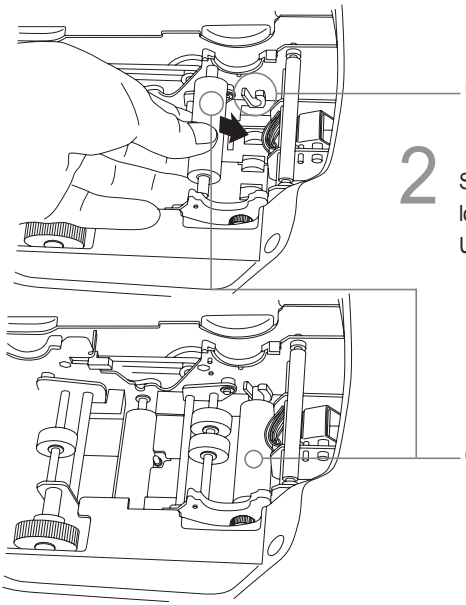
Note

Please note that improper closing lock of the printer lid may cause poor printing. (Check out lock of the printer lid)

1.5 Loading Cleaning Rollers

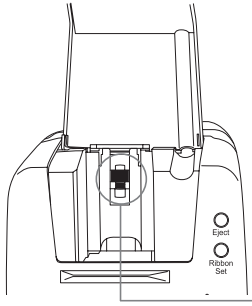


1 Open printer lid by pressing Cover Release Button and raise it fully.



2 Slide the cleaning roller into the loading part and insert roller bar into U-shaped slots until it locks in place.

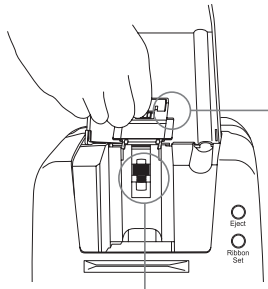
1.6 Card Feeding Hopper



1 Open the card feeding lid.

Card thickness adjustment controller

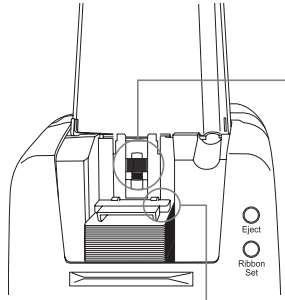
2 Rotate card thickness adjustment controller in the card feeder to synchronize it with the cards you wish to print.



Card feeding weight

3 Lift the card feeding weight.

Card thickness adjustment controller

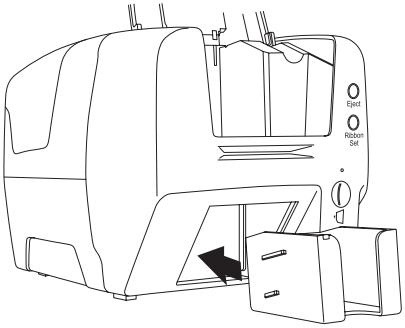


Card thickness adjustment controller

4 After stacking card into the card feeding hopper, put the weight on the stack of the cards.

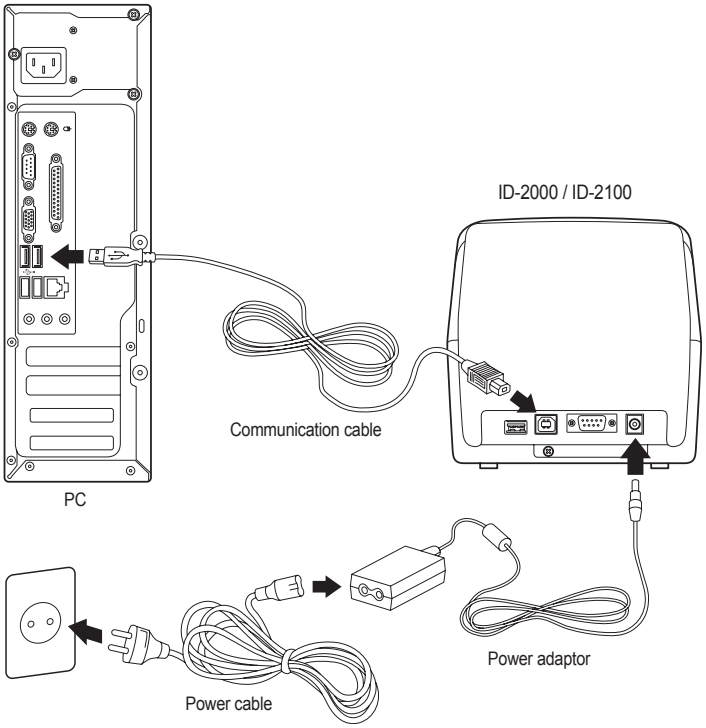
Card feeding weight

1.7 Card Output Stacker



1 Lock the latch of card output stacker into slots of the front side.

1.8 Power Device, Power cable, Communication Cable



2. Software Installation

PC Systems requirement

- Check out minimal PC operating environment.
- MS Widows: Windows 2000/XP (32bit), Windows Vista
- Computer
  - CPU : Pentium III 1GHz above (Pentium IV1.5 GHz recommended)
  - Memory 128 MB above (512 MB recommended)
  - HDD 1 GB above (5 GB recommended)
  - Internet Explorer 5.5 above (6.0 recommended)

For Windows 2000/XP users, only administrator with authority can install and remove the program after log-on.

2.1 Installing FTD2xx Direct USB Driver

Installing

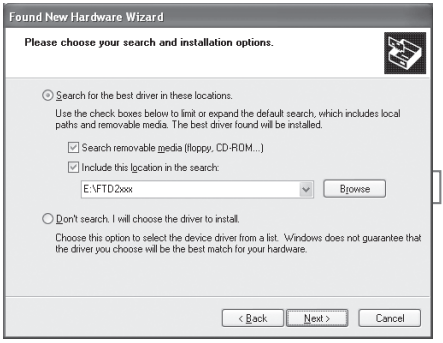
Close all windows in operation. (Recommended)
(Explanation below is based on windows XP. Picture and sequence can differ in Windows 2000.)

1 Attach USB cable to computer and place the printer's power switch in the ON position. The [Found New Hardware] window will open. Select "Install from a list or specific location", then click "<Next>"

Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
This wizard helps you install software for:
PPC ID-2000
If your hardware came with an installation CD or floppy disk, insert it now.
What do you want the wizard to do?
Install the software automatically (Recommended)
Install from a list or specific location (Advanced)
Click Next to continue.
< Back
Next >
Cancel

<New Hardware installation>

2 Select "Search for the best driver in these locations" and "Include this location in the search". Click "Browse" to search the CD location as follows.


Found New Hardware Wizard
Please choose your search and installation options.
Search for the best driver in these locations.
Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.
Search removable media (floppy, CD-ROM...)
Include this location in the search:
E:\FTD2xxx
Browse
Don't search. I will choose the driver to install.
Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.
< Back
Next >
Cancel

<Driver location and file searching>

3 If FTD2xx driver has been found successfully, installation begins.

<Driver installing>

4 In the "Windows Logo Testing" window, select the "Continue Anyway" button.

Hardware Installation
The software you are installing for this hardware:
PPC ID-2000
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

<Windows logo testing>

5 Click the "Finish" button and drive installation will be complete.

<Completing the Found New Hardware>

6 If Windows Restart message opens, restart windows.

2.2 Installing Microsoft Windows Application Software / Driver

Installing

Close all windows in operation. (Recommended)

1 Turn on the computer. In the Found New hardware window, click "Cancel" button.

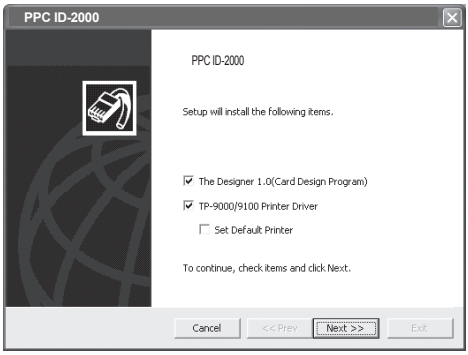
2 The "Insert installation CD" window will open automatically.
- Insert installation CD with printed side up in CD-ROM drive.
- If installation window does not open or if you have closed it, eject CD and re-insert.

In the "Start" Menu, select "Execute" and start "X(Number of CD-ROM drive):¥install.exe"and click "OK" button.

3 Automatically open software installation wizard window when you insert software CD. Click "Start" to start installation process.

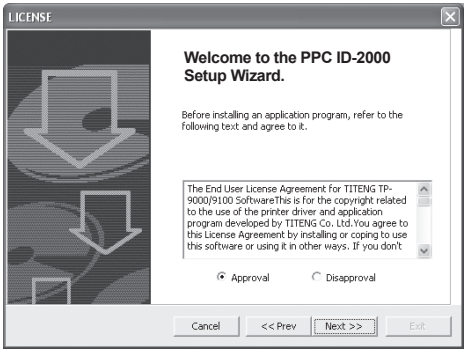
<Start window for software installation>

4 Select the software you wish to install. Click "<Next>"



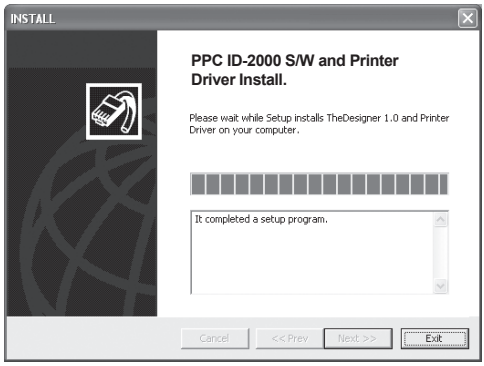
<Software selection window>

5 Read License Agreement. Click "Approval" and "<Next>"


LICENSE
Welcome to the PPC ID-2000 Setup Wizard.
Before installing an application program, refer to the following text and agree to it.
The End User License Agreement for TITENG TP-9000/9100 SoftwareThis is for the copyright related to the use of the printer driver and application program developed by TITENG Co. Ltd.You agree to this License Agreement by installing or coping to use this software or using it in other ways. If you don't
Approval
Disapproval
Cancel
<< Prev
Next >>
Exit

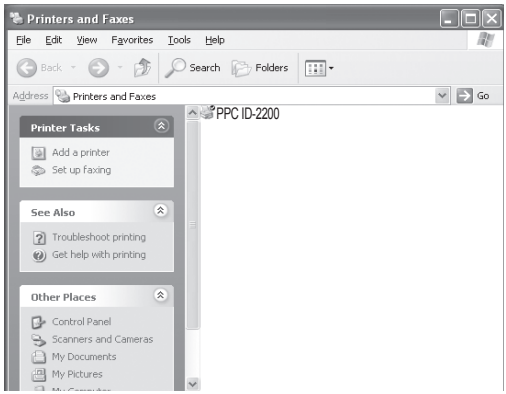
<Software license agreement>

6 When installation is complete, Click "<Finish>"


INSTALL
PPC ID-2000 S/W and Printer Driver Install.
Please wait while Setup installs TheDesigner 1.0 and Printer Driver on your computer.
It completed a setup program.
Cancel
<< Prev
Next >>
Exit

<Completing software installation>

7 Check out the "PPC ID-2000" installed in the printer folder. Check out "PPC ID-2100" software installed in "START → ALL PROGRAM" → "PPC ID-2100".

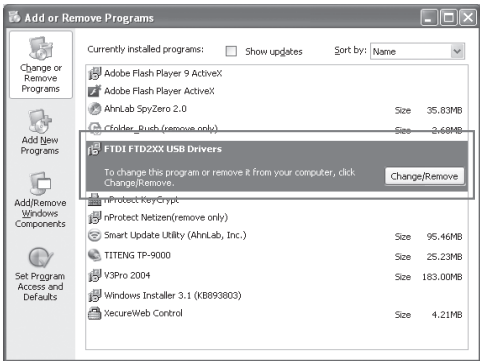


<Printer driver folder>

2.3 Removing FTD2xx Direct USB Driver

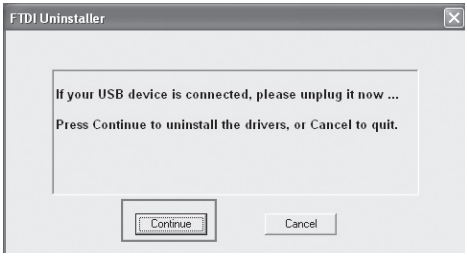
1 Execute "Start / Control Panel → Change or Remove Programs"

2 Click "Change/Remove" to start the process.



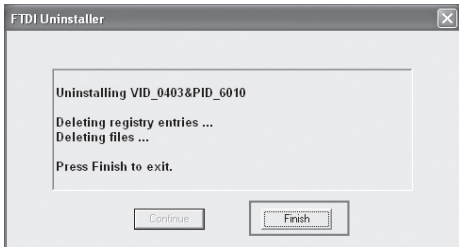
<Removing FTDI FTD2xx USD Drivers>

3 Click "Continue" to remove USB driver.


FTDI Uninstaller
If your USB device is connected, please unplug it now ...
Press Continue to uninstall the drivers, or Cancel to quit.
Continue
Cancel

<Uninstalling>

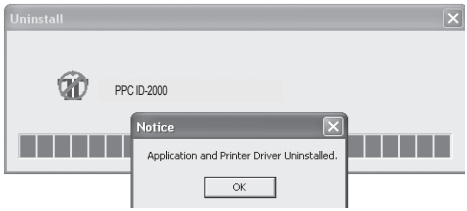
4 When uninstalling is complete, finish the process to click "<Finish>"



<Completing Uninstalling>

2.4 Removing Application Software / Driver

1 In "Start" → "All Program"→"PPC ID-2000"→Click "Remove" to start the process.



<Uninstalling Completed>

Caution When you remove "PPC ID-2000", PPC ID-2100 printer driver is removed at the same time.

2.5 Printing with ID-2200 on Microsoft Windows Application Software

This section gives you instructions on how to print on Windows application software.
- Print sequence may differ according to application software. To ensure right sequence, please refer to user manual of the application software.

1 Open file of the Windows application software you wish to print.

2 Go to"File" => "Print".

- Make sure that you choose PPC ID-2200.
- Print sequence may differ according to application software. On most of windows application software, you can print out by clicking printer icon on menu bar or print in "File" menu.

3 Select documents you wish to print. Click "Print" or "OK" to start printing process. The files to be printed standing by in spool allocated for ID-2200.

- Ensure that the printing image is oriented in same direction(vertical, horizontal) as that of paper. Preview function of software will help you check it out.

What is PPC ID-2200 Spool?

Spool saves data temporarily on hard disk from application program, not sending more than one job to printer at a time. And the system will hold them up until the printer can accept the data.

Canceling Print

There are two ways to cancel printing. Canceling in application software and canceling in spool in a queue.

- If card is jammed on the way of printing, you have to cancel it, which costs ribbon and card.

Canceling in Spool

Spooled files queue up for being sent to printer.

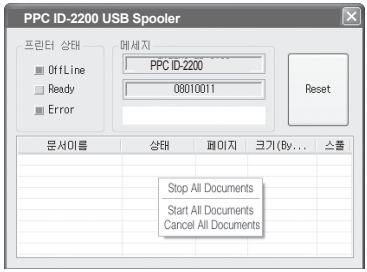
1 Double click printer icon in menu bar in bottom right.

2 If user wishes to change settings, right click on the printer icon.

- Information : Shows the information of spool.
- Hide after printing : If printing is complete, spool window disappears.
- Always on top : Set the spool window always on top.
- EXIT : Terminate spool window.

Spool program resume when printing in operating again, even though you have already terminated it.

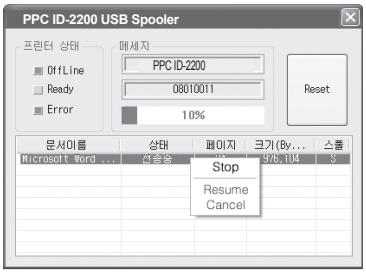
3 Set up all spooled file prior to printing.



- Right click on the printing standby. You can select one of "All document stop", "All document start" and "All document cancel".

4 Set up of spooled file in printing

- Click right button on spooled file in printing. You can select one of "Stop", "Resume", "Cancel".



Caution

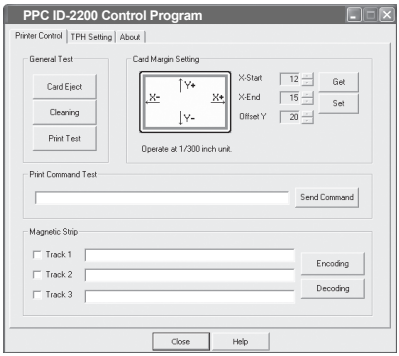
If you stop the document printing, the file in printing can be mixed up with other spooled file.

Controlling PPC ID-2200 printer remote

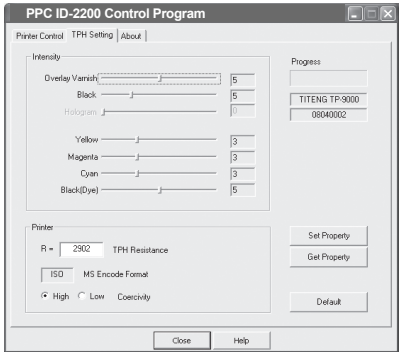
Program that allows users to control PPC ID-2200 remote is provided. Follow procedure below to set up status of printer for remote controlling.

1 Click "Start" → "All Programs" → "PPC ID-2200" → "PPC ID-2200 remote controlling program"

- **Printer control tab**
  Printer cleaning function is provided for best printing quality. If image of printed card is incorrectly positioned, set the card margin.



- **Printer head set up**
  Set color density for best printing quality. And input TPH resistance value.



- **Printer information tab**
  In the printer information tab, copyright and version is described.

2.6 Printer Settings in Microsoft Windows

User can set up own printing environment with various functions the printer provides.

Opening Printing Preferences window of the printer

The values input in printing program will get back to previous one when current operating program terminates.

Opening Printing preferences on application software

1. Execute printing order in application program.
2. Click <Printing Preferences>.
3. Click each tab and windows will open.
4. Upon completing settings, click <OK>.

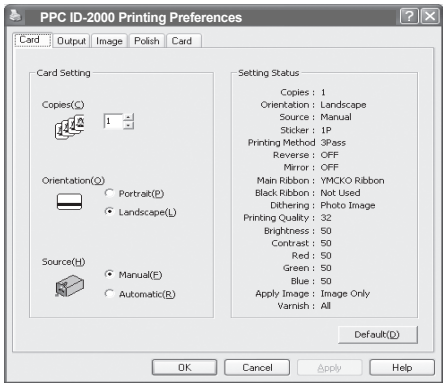
Opening in printer folder

1. "Start" → "Printers and Faxes"
2. Double click "PPC ID-2200"
3. Open Printing Preferences window in a printing queue as follows "Printer" → "Printing Preferences" → "Properties" → "Printer Setting"
4. Click each tab, then window opens.

2.7 Printer Driver Settings

Printing Preferences

- **"Card" tab**
  Set the number of copies, the card orientation, manual/auto feeding.

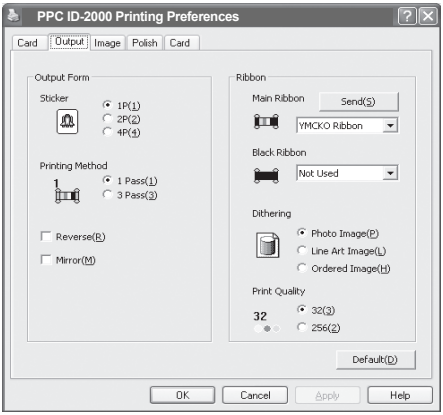


Items	Descriptions
Number of copies	• Set the number of copies; 1 to 999
Card orientation	• USet the card orientation. Default is horizontal.
Manual / Auto Feeding	• USet the card feeding method; manual or auto.

Note

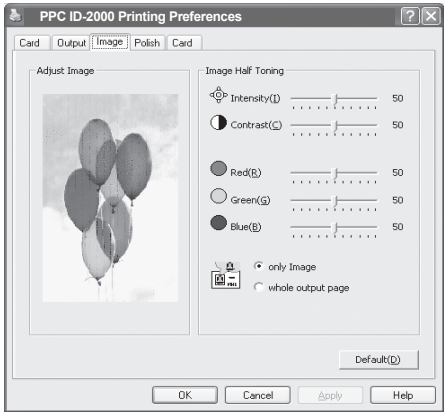
Ensure that the printing image is oriented in same direction (vertical, horizontal) as that of card. Preview function of software will help you check it out.

- **"Output" tab**
  Set Sticker, Printing Method, Main Ribbon, Dithering.



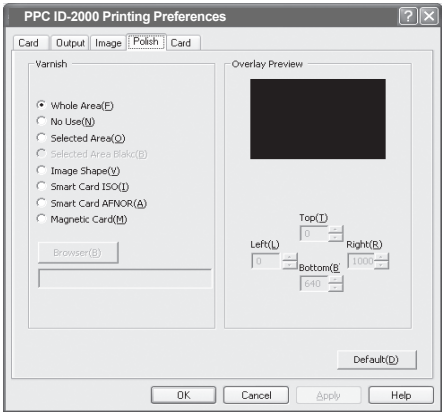
Items	Descriptions
Sticker	Print same image in sticker format for 1, 2, 4 sheets.
Printing Method	1 pass print : Transfer all data of YMCKO and then print.
	3 pass print : Transfer corresponding data of each color and then print.
Reverse	Reverse RGB and print.
Mirror	Mirror the printing data and print.
Main Ribbon	YMCKO Ribbon : Yellow, Magenta, Cyan, Black, Overlay
	K Resin : Resin black ribbon. Capable to print 256 color level.
	K Wax Resin : Wax resin ribbon
Black Ribbon	Not used : Black printed in color
	Text : Print text in document with K ribbon.
	Always : Print all black in document with K ribbon.
	Except image : Print all except image in document with K ribbon
Dithering	Photo image : Print soft image
	Line Art Image : Print image in pattern set.
	Ordered Image: Print image in ordered pattern
Print Quality	32 : Print image level 32 (fast printing), 144 cards / hour
	256 : Print image level 256 (High quality printing), 144 cards / hour

- **"Image" Tab**
  Set the Card Orientation, Printing Quality, Paper Size and Paper Quality



Items	Descriptions
Intensity	Set brightness of image
Contrast	Set contrast of image and make it more bright
Red	Set red
Green	Set green
Blue	Set blue
Only Image	Half toning applicable only to image
Whole print page	Half toning applicable whole data

- **"Polish" Tab**
  Set varnish on the card.



- **"Card" Tab**
  If you click the image, the website for PPC will open on internet browser.

3. Instructions on Maintenance

3.1 Maintenance of Product

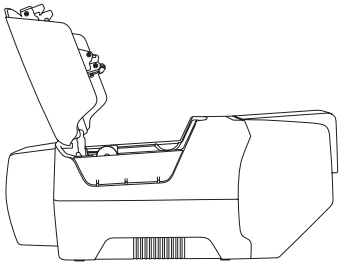
Never use card below

- Heavy damaged card
- Card with heavy dirt
- Card with scratch
- Bended or deformed card

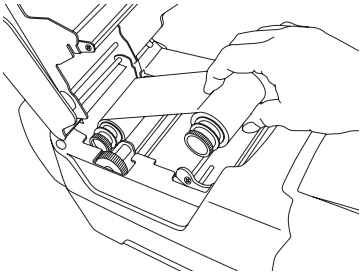
Cleaning

- Place the printer power switch in the OFF position and pull out the plug and power adaptor. Cleanse the surface of the printer with wet soft cloth.
- Do not let water inside the printer.
- When the printer gets dry, turn power on.

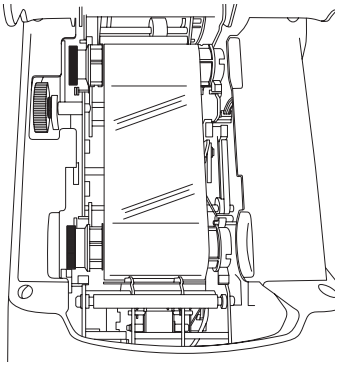
3.2 How to Replace Ribbon



1 Open printer lid by pressing the Cover Release button.



2 Hold the used ribbon and pull it out from the printer.



3 Make sure that supply ribbon and rewinding ribbon placed in right position. Close the printer lid.

3.3 How to Clean the Printer

Cleaning Card

Dirt or embedded contamination on roller may cause problem.
Follow the recommended maintenance procedures below.

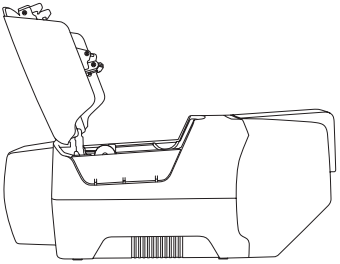
1. Turn the power off and remove card and ribbon cartridge.
2. Turn the power on with pressing "Eject" button at the same time. When front LED panel flashes, insert the cleaning card wet with alcohol cleanser into the front card slot.
3. After completing cleaning, cleaning card is ejected automatically. And the cleaning card is reusable.
4. Leave the printer for 2 ~ 3 minutes until alcohol cleanser evaporates.

Cleaning Roller

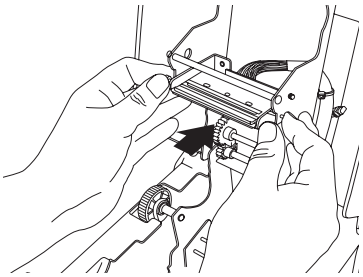
For cleaning roller maintenance, follow the procedures below.

1. Remove the cleaning roller from the printer.
2. Wet and clean the cleaning roller in flowing water.
3. When the cleaning roller gets dry, insert it into the printer.

3.4 How to Replace TPH(Thermal Print Head) and Consumables

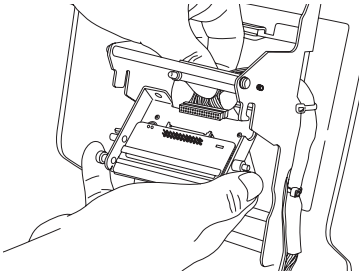


1 Turn the power off. Open printer lid by pressing the Cover Release button.



2 Pull the TPH upward and backward, then head cover is detached. And disconnect cable connectors from the printer.

3 Connect the new TPH's cable connectors to the printer.



4 After completing TPH replacement, execute "Start" → All Program" → "PPC ID-2X00" → "Remote Control Program".
In remote control program, set the resistant value of new TPH.
Click the "Printer Transfer" button.

For more information, refer to "Printer Head settings" on page 25 in the user's manual ".
TPH resistance value is described on TPH.

3.5 Troubleshooting

1. In case front LED keeps on flashing or always on all the time.

Error Code	Trouble	Solution
10	TPH Module open	- Check TPH module is closed
11	TPH Up/Down failure	- With TPH module opened, check printer inside and turn power off and on. Perform module Up/Down.
12	Card jammed	- Remove the jammed card inside the printer
13	TPH temperature trouble	- Check that temperature is within the operating temperature range. - Open TPH module and check that cable is correctly connected.
14	Encoder trouble in ribbon control part	- Check that ribbon is cut - Check that ribbon run out. - Check that encoder in ribbon control part is correctly assembled and operates normal.
15	Medium trouble	- Check that size of the medium meets specification - If same trouble repeats, contact dealer.
16	EEPROM trouble	- Turn power on again. If same trouble repeats, contact dealer.
17	IC Contact Module not correctly positioned	- Check that IC Contact Module is correctly positioned - If not correct, turn power off and on. - If same trouble repeats, contact dealer.
50~51	Flipper module communication trouble	- After remove card, turn power on. - If same trouble repeats, contact dealer.
52~56	Flipper module mechanism trouble	- After remove card, turn power on. - If same trouble repeats, contact dealer.
57	Flipper improperly positioned or Card inside	- After remove card, turn power on.

Caution

After the trouble above is resolved, perform one of three below to get printer into normal operation.

1) Press reset button with ribbon cartridge correctly loaded.
2) Press "EJECT" button
3) Place power switch in OFF position, and ON position.

2. Other problems

Trouble	Solution
Found frequently ribbons cut in the front edge of card when printing	- In printer driver or The Designer settings, increase Print Start Position.
Found frequently ribbons cut in the rear edge of card when printing	- In printer driver or The Designer settings, increase Print End Position.
Printer not found in The Designer or application software	- Check that printer driver is correctly installed. - Check that communication cable is properly connected - Reboot your PC.
Other than power LED, 4 Front LEDs continuously flash in sequence	- Check out **http://www.ppc.au/support** for firmware download. - Download the latest version of firmware for the printer. - Perform install using firmware install program.
Firmware installation not performed	- With pressing "EJECT", "RESET" switch at the same time, place power switch in the ON position. - Check that front 4 LEDs flash in sequence, install firmware using firmware install program.

3.6 Technical Specifications

Items		Descriptions
Motor		Step Motor Driven
Print	Thermal Dye Sublimation	1) Printing : Dye Sublimation 2) Printing Speed : Mono 4 sec, Color single sided 25 sec, Color dual-sided 32 sec(YMCKOK) 3) Printing side: Single or Dual sided
	TPH	1) Resolution : 300DPI(11.8DPM) 2) Pulse Life : 1x108, Abrasion : 50km
	Color & Mono	1) Color : 165K color, Full color 2) Mono : Black + Overlay, Black
Ribbons Cartridges	Color(YMCKOK)	160 cards / roll
	Color (YMCKO)	200 cards / roll
	Mono (KO)	500 cards / roll
	Black (K)	1,000 cards / roll
Electrical	CPU	32 Bit Processor
	RAM	64 Mb
	User inferface	LCD, LED, Switch
	Power adaptor	Input : 100 ~ 240V / 50 ~ 60Hz, Output : 24V / DC
Cards	PVC Card	53.98(W) x 85.7(H) x 0.77(T)
	PET Card	53.98(W) x 85.7(H) x 0.2(T)
Encoding	Magnetic Stripe	1) ISO7811 (Track1,2,3) (Option) 2) HiCo/LoCo
	Contact (IC)	1) ISO7816 (Option) 2) EMV, K-Cash
	Contactless (RF)	ISO14443 A,B, Mifare (Option)
Interface	USB	USB1.1, USB2.0
Environmental	Operating Temperature	5ºC ~ 45ºC, 20 ~ 70% RH
	Storage Temperature	-25ºC ~ 70ºC
Dimension	ID-2000 (Single Side)	292(L) x 196(H) x 192(W)
	ID-2000 (Dual Side)	359(L) x 196(H) x 192(W)
	ID-2100 (Single Side)	403(L) x 202(H) x 192(W)
	ID-2200 (Dual Side)	471(L) x 202(H) x 192(W)

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